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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,598	04/21/2004	Zhen Chen	1856-24601 (94801.A)	5531

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EXAMINER	
LANGEL, WAYNE A	
ART UNIT	**PAPER NUMBER**
1754	

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES DEPARTMENT OF COMMERCE
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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.

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ART UNIT	PAPER NUMBER
	—

DATE MAILED:

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), ~~_____ days~~ from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☒ Notice of References Cited by Examiner, PTO-892.
2. ☐ Notice of Draftsman's Patent Drawing Review, PTO-948.
3. ☒ Notice of Art Cited by Applicant, PTO-1449.
4. ☐ Notice of Informal Patent Application, PTO-152.
5. ☐ Information on How to Effect Drawing Changes, PTO-1474.
6. ☐ _____.

Part II SUMMARY OF ACTION

1. ☒ Claims 1-22 are pending in the application.

   Of the above, claims _____ are withdrawn from consideration.

2. ☐ Claims _____ have been cancelled.

3. ☐ Claims _____ are allowed.

4. ☒ Claims 1-22 are rejected.

5. ☐ Claims _____ are objected to.

6. ☐ Claims _____ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____. has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).

12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____ ; filed on _____.

13. ☐ Since this application apppears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Figueroa et al or Reyes et al in view of either Zhou or Vaarkamp. Figuera et al and Reyes et al both disclose the partial oxidation of hydrocarbons in the presence of a rhodium catalyst. (See col. 3, lines 17-37 of Figueroa et al, and col. 5, lines 45-60 of Reyes et al.) The difference between the process of Figueroa et al and Reyes et al, and that recited in claims 1-3, 8 and 9, is that Figueroa et al and Reyes et al do not disclose that rhodium should be recovered or reclaimed from the spent catalyst. Zhou and Vaarkamp both teach that rhodium catalysts should be regenerated. (See the paragragh bridging columns 1 and 2 of Zhou, and col. 1, line 42 to col. 2, line 2, line 11.) It would be obvious from either Zhou or Vaarkamp to regenerate the rhodium catalyst of either Figueroa et al or Reyes et al, since the process of Zhou and Vaarkamp are directed broadly to the regeneration of any rhodium catalyst, and one would be motivated for economic and technical reasons to regenerate the rhodium catalyst of either Figueroa et al or Reyes et al. The regeneration of the rhodium catalyst would constitute a step of "reclaiming rhodium", as recited in applicant's claims.

Claims 4-7 and 10-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In cliam 4, it is indefinite as to what would

constitute a step of "recovering a final product from the second intermediate species". For example, it is indefinite as to whether the phrase would require that the second intermediate species is physically separated so as to obtain a final product, whether it is reacted so as to obtain a final product, or neither.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 6,764,662 in view of either Figueroa et al or Reyes et al. It would be obvious from either Figueroa et al or Reyes et al to employ the process recited in the claims of Pat. 6,764,662 to recover rhodium from a partial oxidation process.Any inquiry concerning this communication should be directed to Wayne Langel at telephone number 571-272-1353.

Wayne A. Langel

Wayne Langel
Primary Examiner
Art Unit 1754